

REMARKS

This is in response to the Office Action mailed on June 26, 2006. In the Office Action, the only remaining rejections were a rejection of claims 1-9 under 35 U.S.C. §102 (b) as being anticipated by Loatman et al. (U.S. Pat. No. 4,914,590, hereinafter "Loatman"), and a rejection of claims 10-17, 20-23, 32 and 33 under 35 U.S.C. §103(a) as being unpatentable over Loatman. Applicant respectfully traverses the Examiner's rejection. With this Amendment, claims 1 and 10 are amended and the remaining claims are unchanged in the Application.

On page 2 of the Office Action, the Examiner rejected claims 1-9 under 35 U.S.C. §102(b) as being anticipated by Loatman. Of these claims, claim 1 is the only independent claim.

The present system allows a developer to debug natural language parses. A natural language processing system (NLP system) generates parse trees corresponding to input text. The parse trees are generated by combining smaller text fragments into larger text fragments at connecting points in the parse tree. The larger text fragments are referred to as constituents and are generated at the connecting points by applying grammar rules to the text.

In the present system, where a constituent is formed by the NLP system, by applying a grammar rule, a developer can correct the parse tree simply by viewing alternate rules, which are alternates to the rule used in generating the constituent at a selected connecting point, and by selecting one of those alternate rules to apply at that selected connecting point. This is in contrast to prior systems where a developer might be able to identify an improper constituent in a parse tree, but then would only be able to view the rule which was applied to generate the improper constituent. This requires the developer to remember other rules which may apply at that selected connecting point, and to manually recall and apply those rules. By allowing the developer who is debugging the parse tree to view alternate rules, which are alternates to the rule applied in generating an improper constituent, the present system speeds up debugging and alleviates the requirements placed on the developer to remember rules.

Loatman does not do this. In fact, the only place where the Examiner has asserted that Loatman displays rules is in FIG. 19. However, even assuming the display in FIG. 19 shows rules, those rules could only be considered as candidate rules and not alternate rules. In other

words, the parser in Loatman specifically has not generated a constituent by applying a rule in FIG. 19. Instead, the parser was unable to recognize a word. FIG. 19 expressly states "dirty not recognized." and then shows some definitions for "dirty" which might be used in generating the parse. Therefore, those definitions can only be considered as candidate definitions because no definition has yet been used. They cannot be considered alternate definitions which are alternates to a definition that has already been used in generating the parse.

By contrast, independent claim 1 specifically states: "displaying a parse tree for a textual input, the parse tree being generated based on rules and comprising at least one connecting point having two children; ...determining whether a rule was applied to form a constituent at said selected connecting point; and if the determination is positive, displaying a plurality of display items proximate to said selected connecting point, the display items including alternate rules, other than the rule used in generating the constituent at the selected connecting point."

Thus, it is clear from claim 1 that a rule was already applied by the parser to generate a constituent. Then, the user is able to display alternate rules, proximate the selected connecting point, wherein the alternate rules are rules other than the rule used in generating the constituent at the selected connecting point. This is simply neither taught nor suggested by Loatman, because Loatman does not teach a system where a rule is successfully applied, and then alternate rules (which are alternates to the rule successfully applied) are displayed to the user. Therefore, Applicant submits that Loatman cannot anticipate independent claim 1. Thus, Applicant submits that independent claim 1 is allowable over Loatman.

On page 6 of the Office Action, the Examiner rejected claims 10-17, 20-23, 32 and 33 under 35 U.S.C. §103(a) as being unpatentable over Loatman. Applicant respectfully traverses the Examiner's rejection. Of the rejected claims, only claim 10 is an independent claim.

As with claim 1, claim 10 makes it clear that a selected connecting point is being examined. The selected connecting point is a point at which a constituent was formed by applying a grammar rule. Then, the system allows the user to activate a menu item to display alternate grammar rules.

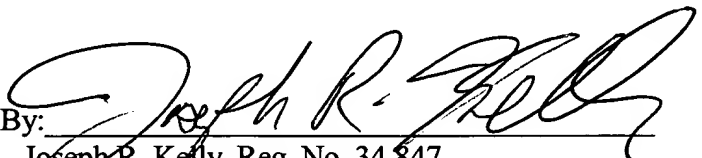
Specifically, independent claim 10 includes "displaying a parse tree, generated by applying grammar rules, for an input text comprising at least one connecting point having two children; ...determining whether a rule was applied to successfully form a constituent at the selected connecting point; and displaying a plurality of menu items proximate to said selected connecting point, the menu items including an alternate grammar rules display item which, when activated, displays alternate grammar rules comprising grammar rules that are alternates to the rule applied in generating the constituent formed at the selected connecting point in the parse tree." Since Loatman does not teach or suggest displaying alternate grammar rules, which are alternates to a rule that was successfully applied to generate a constituent, independent claim 10 is allowable over Loatman.

Dependent claims 2-9, 11-17, 20-23, 32 and 33 all dependent either directly or ultimately from one of the independent claims 1 and 10. Since Applicant submits that independent claims 1 and 10 are allowable, Applicant submits that the dependent claims are allowable as well. Therefore, reconsideration and allowance of claims 1-17, 20-23, 32 and 33 are respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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